

## **REMARKS**

### **Claim Amendments**

Claim 1, 11, and 21 have been amended herein to make clear that the present invention employs two aspherical engaging surfaces ("inferior" and "superior") that cooperate to secure an aspherical ocular globe, e.g., for use in a surgical procedure such as an incomplete lamellar keratotomy. Since the purpose of these amendments is to emphasize the patentability of the claims, entry of these amendments and consideration of the resulting claims is respectfully requested.

### **Claim Rejections**

Claims 1 – 10 stand rejected under 35 U.S.C. 103(c) as being anticipated by U.S. Patent No. 6,007,553 to Hellenkamp et al. in view of U.S. Pub. No. 2003/0045895 to Ross et al.

Claims 11-20 stand rejected under 35 U.S.C. 103(c) as being obvious over U.S. Patent No. 6,007,553 to Hellenkamp et al. in view of U.S. Pub. No. 2003/0045895 to Ross et al. and in further view of U.S. Patent No. 6,506,198 to Amano.

Claims 21-31 stand rejected under 35 U.S.C. 103(c) as being obvious over U.S. Patent No. 6,506,198 to Amano in view of U.S. Pub. No. 2003/0045895 to Ross et al.

Claim 32 stands rejected under 35 U.S.C. 103(c) as being obvious over U.S. Patent No. 6,506,198 to Amano in view of U.S. Pub. NO. 2003/0045895 to Ross et al. and in further view of U.S. Patent No. 6,030,398 to Klopotek.

The Applicants respectfully traverse the above-mentioned claim rejections because the suggested combinations of references fail to teach all the limitations recited by the claims. The Examiner apparently relies upon Ross as teaching the claimed features of "an aspherical inferior engaging surface and an aspherical superior engaging surface." The meanings of these terms are illustrated, e.g., in the inventive embodiments described at page 10, lines 9-12 and lines 28-31 of the *Applicants' Specification*. Accordingly, an "spherical inferior engaging surface" is preferably the aspherical inner wall of the inferior (i.e., lower) end of a suction ring, as exemplified by surface 101

in Figures 5 and 8. Similarly, an “aspherical superior engaging surface” is preferably the aspherical inner wall of the superior (i.e., upper) end of a suction ring, as exemplified by surface 103 in Figures 5 and 8.

The present claims further recite “an aperture sized to receive and expose the cornea.” The aperture should not be confused with the above-mentioned aspherical engaging surfaces, nor is the aperture size or shape necessarily dependent on the size or shape of the aspherical engaging surfaces – particularly the aspherical inferior engaging surface. In this regard, reference is made to the following passage of the *Applicants’ Specification*, at page 12, lines 11-17):

It should be recognized that changes could be made to the diameters of the inferior and superior engaging surfaces without affecting the diameter of the aperture through which the cornea is presented for the lamellar keratotomy or other corneal surgical procedure. Similarly, the diameter of the aperture can be varied without affecting the diameter of the superior and inferior engaging surfaces. Furthermore, the shape of the aperture can be round, oval, or other non-circular shape allowing the physician to cut a corneal disk in a shape other than a circle.

Ross discloses the use of a ring insert 274’ (depicted in FIG. 20 of Ross) having “an oblong shaped inner opening 282,” i.e., an oval-shaped corneal aperture. Ross further discloses (see FIGS. 6 and 7 of Ross) a suction ring having inferior and superior engaging surfaces, but there is no teaching that the engaging surfaces are themselves aspherical. The point is further illustrated by the 3-D nature of the term “aspherical,” in contrast to the 2-D nature of the aperture shape. At best, Ross *might* (for the sake of argument) suggest a superior engaging surface that is aspherical, but there is no teaching whatsoever of an aspherical inferior engaging surface in the suction ring of Ross. In fact, FIG. 20 of Ross depicts the outer circumferential shape of ring insert 274’ as being circular, in contrast to the oval shape of the aperture 282. If anything, this is suggestive that the inferior engaging surface is spherical, rather than aspherical.

Thus, *Ross teaches away* from the use of an aspherical inferior engaging surface in the suction ring. There is no suggestion to combine if a reference teaches away from its combination with another source. *See Fine*, 5 U.S.P.Q.2d at 1599.

Applicants furthermore submit that Hellenkamp teaches away from its combination with Ross. The microkeratome of Hellenkamp pivots about a vertical axis to drive a cutting blade through an arcuate path in the horizontal plane, while the microkeratome of Ross is driven along a straight track in the horizontal plane. Thus, the elliptical suction ring of Ross – which is designed for a straight cutting path – is not necessarily suitable for use with the arcuate cutting path of Hellenkamp. Furthermore, Hellenkamp is critical of straight-driven microkeratomes like that of Ross, since: (1) the cord drags behind the instrument and could interfere with the operation; and (2) the center of gravity is not over the patient's eye (see Hellenkamp, at col. 16 line 61 through col. 17, line 5). Thus, a skilled person in the art of microkeratomes would be *motivated against* applying the teachings of Ross to the teachings of Hellenkamp, and the combination is improper.

Applicant further submits that Amano teaches away from its combination with Ross. Amano teaches means for adjusting the height or elevation at which a cutting blade intersects the patient's eye *with respect to the suction ring* (see, e.g., Abstract of Amano). Thus, the purpose of Ross's ring insert (elongate the resulting corneal flap) would be frustrated by its combination with Amano, because the elevation of Amano's cutting blade would result in the blade engaging a section of the patient's eye that was not bounded by the oblong opening of Ross's ring insert. Accordingly, an elongated corneal flap could not be reliably produced. Thus, a skilled person in the art of microkeratomes would be *motivated against* applying the teachings of Ross to the teachings of Amano, and the combination is improper.

Applicant therefore submits that each of the suggested combinations lack the requisite support, and, failing such support, the suggested combinations are based upon improper hindsight reconstruction of the presently claimed invention. Reconsideration and withdrawal of the above-mentioned claim rejections is therefore respectfully requested.

In conclusion, Applicant submits that all remaining claims in the present application are

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entitled to allowance and such action is earnestly solicited.

In the event there are additional charges in connection with the filing of this Response, the Commissioner is hereby authorized to charge the Deposit Account No. 50-0714/CARA/0013 of the firm of the below-signed attorney in the amount of any necessary fee.

Respectfully submitted,



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